

## REMARKS

Favorable reconsideration and withdrawal of the rejections set forth in the above-mentioned Official Action in view of the foregoing amendments and the following remarks are respectfully requested.

### Claims Status

Claims 69 through 76 remain pending in the application. Claims 72 through 75 have been amended to even more succinctly define the invention and/or to improve their form. It is respectfully submitted that no new matter has been added. Claim 69 is the only independent claim pending in the application.

### Section 112 Rejections

(1) Claims 72 through 75 are rejected under 35 U.S.C. § 112, first paragraph, as set forth in part 2, at pages 2 and 3 of the Official Action, as failing to comply with the written description requirement.

With reference to the phrase “butted against each other to form a butted portion” in Claim 72, the Examiner’s asserts that “applicant was not in possession of the claimed invention [because] an abutted end was only envisioned in those embodiments where a single turn of the sheet took place[,] and not at least two turns as recited in claim 69 and as described in reference to the thirteenth embodiment.” (Emphasis added)

It is respectfully submitted that the Examiner is misconstruing the phrase “butted against each other” to require the two ends of the film to be in direct contact with one another. According to such interpretation, multiple turns of the sheet would be precluded from the scope of the claims. It is respectfully submitted that such interpretation is not in keeping with the disclosed invention as described in the specification in connection with

the drawings, which generally provides for the two ends of the sheet to be either “overlapping” or “butted” but not necessarily in contact with one another.

For example, Figure 44 shows the two ends 74a and 74b of the sheet film 74 being butted, as opposed to other embodiments where the ends are overlapping portions of the sheet film. The description of Figure 44, at page 58 of the original specification, makes clear that “the sheet film 74 was wound such that *the leading and the trailing ends of the film are butted against each other in a certain section E (portion C)*” and that “the two ends 74a and 74b formed butted portions.” (Emphasis added). Based on this description of Figure 44, it is respectfully submitted that the phrase “butted against each other” must be interpreted to include the arrangement illustrated in Figure 44, where the ends of the film are positioned approximately on a line normal to an outer surface of the columnar member, with a layer of film interposed between the ends of the film, such that the ends of the film are not in contact with each other.

In addition, the specification as originally filed makes clear, for example, at page 65, lines 23 through 26, that any of the disclosed embodiments, including those wherein the film has obliquely cut ends (e.g., the eleventh embodiment; Figure 27), and those wherein the ends of the film are cut at an angle (e.g., embodiment fifteen; Figure 51), can be obtained by “winding the sheet film on the columnar member a plurality of number of times.” Further, at page 68, lines 12 through 14, the specification states that in any of the embodiments “it is possible to enhance the strength of the connected portion by changing the angle which the butted end face[s of the film form] with the film surface.”

As seen from the foregoing, the inventors clearly had possession of embodiments of the invention wherein the ends of the film are either butted and/or overlying.

It is respectfully submitted the Examiner's assertion that Applicants envisioned only embodiments involving a single turn of the sheet is clearly contrary to the above-noted embodiments of the invention. Accordingly, it is respectfully submitted that the rejection is not well made and should be withdrawn.

(2) Claims 72 through 75 are also rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

The Examiner asserts that one of ordinary skill would not know how to make/use the claimed invention because it is not clear how one can wind the film two times and obtain an abutting portion. This rejection also is traversed for substantially the same reasons discussed above in Section (1). Specifically, embodiments of the invention are described and shown with sufficient detail at least in the above-noted portions of the application so as to enable one of ordinary skill to practice the invention wherein the ends of the film are either butted or overlying. It is respectfully submitted that the rejection is not well made and should be withdrawn.

(3) Claims 72 through 75 are also rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

With reference to in the embodiment of Figure 44, the Examiner asserts "where at least two turns [of the film] are provided, the ends 74a and 74b [of the film] are not butted together." This rejection also is traversed for substantially the same reasons discussed above in Section (1).

Nevertheless and without conceding the propriety of this rejection, Claims 72 through 75 have been amended to even more clearly recite features of the claimed invention. It is respectfully submitted that these claims fully satisfy the requirement of

Section 112, second paragraph. Accordingly, it is respectfully submitted that this Section 112 rejection has been overcome.

#### Section 103 Rejections

Claims 69, 71, and 76 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Document No. 7-205274 (JP '274) in view of Japanese Patent Document No. 55-57429 (JP '429) for the same reasons set forth in the previous Official Action.

Claims 70 and 76 are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '274 and JP '429 and further in view of Japanese Patent Document No. 5-131555 and newly-cited U.S. Patent No. 2,794,481 (Anderson).

#### Response to Art Rejections

The art rejections are also respectfully traversed.

Independent Claim 69 calls for a method of making a tubular film that includes the steps of winding a thermoplastic sheet film on a columnar member with at least two turns so that leading and trailing ends of the wound film are positioned approximately on a line normal to an outer surface of the columnar member without overlapping each other; fitting a tubular molding member over the wound film; and connecting the leading and trailing ends of the film by heating the wound film, the columnar member, and the tubular member up to a temperature at which the wound film is softened, thereby forming the wound film into the tubular film.

JP '274, discloses producing a tubular film by winding a sheet film into a tubular shape and heating only the leading and trailing ends of the sheet. The other portions of the film are not heated. Consequently, a thermal load is concentrated on the leading and

trailing ends and they contract. This results in distortion of the tubular film so formed. In the claimed invention, the entire tubular film, the columnar member, and the tubular molding member are heated. The softened film is then formed. Thus, a concentrated thermal load does not exist, pressure is evenly exerted, and distortion of the tubular film does not occur in the claimed invention.

JP '429, discloses a method of obtaining a cylindrical molding wherein a single sheet of a PTFE resin film is loaded into a space 4 formed between a cylindrical mold 1 and a mandrel. Thermal expansion causes the film to expand in the space 4. JP '429 does not disclose that at least two turns of the sheet are wound on a columnar member.

JP '555 discloses a method of molding a prepreg formed of long fibers of a thermoplastic resin material between an outer mold and a core. JP '555 does not disclose that a sheet film is wound around an inner mold. *A fortiori*, JP '555 does not address a condition of bonding leading and trailing ends of a sheet film.

Anderson is merely cited in combination with JP '555 for suggesting that a core could be formed of PTFE or other suitable materials.

Anderson discloses a method of making resin tubing, wherein fibers 7 are wound around mandrel 1. Anderson makes use of a difference of thermal expansion coefficients of an inner mold and an outer mold. See column 2, line 65 through column 3, line 65. However, Anderson uses a heat-curable resin material. In the claimed invention, the film made of thermoplastic sheet film is wound around a columnar member.

It is again respectfully submitted that the combination rejections are not well founded. The Examiner has provided a *rationalization* for combining the teachings of the cited art based on the benefits of doing so, e.g., uniformity in the thickness of the finished

assemblies. If the Examiner maintains the combination rejections, he is kindly requested to show where in the cited art *per se* there is a basis for combining the art.

In view of the foregoing, it is respectfully submitted that independent Claim 69 is allowable over the cited art whether taken individually or in combination.

#### Dependent Claims

Claims 70 through 76 depend either directly or indirectly from Claim 69 and are allowable by virtue of their dependency and in their own right for further defining Applicants' invention. Individual consideration of the dependent claims is respectfully requested.

#### Closing Comments

This Amendment could not have been presented earlier in the prosecution, inasmuch as it was earnestly believed that the claims heretofore on file were in condition for allowance. It is believed that the Examiner's familiarity with the present application will allow full consideration hereof without the expenditure of undue time and effort.

#### Personal Interview

Applicants' undersigned attorney believes that a personal interview will expedite prosecution of this application. In the event that the Examiner takes up the application for action and a request for such interview has not been made, he is kindly requested to contact Applicants' undersigned attorney.

Favorable reconsideration and early passage to issue of the present application are earnestly solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our New York office at the address shown below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. M. Wannisky', is written over a horizontal line.

Attorney for Applicants

*William M. Wannisky*

Registration No. 28,373

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200

WMW\las

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